

Sub D-3

When used herein, "high stringency" refers to conditions that:

(i) employ low ionic strength and high temperature for washing after hybridization, for example, 0.1 x SSC and 0.1% (w/v) SDS at 50°C;

(ii) employ during hybridization conditions such that the hybridization temperature is 250°C lower than the duplex melting temperature of the hybridizing polynucleotides, for example 1.5 x SSPE, 10% (w/v) polyethylene glycol 6000 (Amasino, 1986), 7% (w/v) SDS (Church, 1984), 0.25 mg/ml fragmented herring sperm DNA at 65°C; or (iii) for example, 0.5M sodium phosphate, pH 7.2, 5mM EDTA, 7% (w/v) SDS (Church, 1984) and 0.5% (w/v) BLOTTO (Johnson, 1984; Reed, 1985) at 70°C; or (iv) employ during hybridization a denaturing agent such as formamide (Casey, 1977), for example, 50% (v/v) formamide with 5 x SSC, 50mM sodium phosphate (pH 6.5) and 5 x Denhardt's solution (Denhardt, 1966) at 42°C; or (v) employ, for example, 50% (v/v) formamide, 5 x SSC, 50mM sodium phosphate (pH 6.8), 0.1% (w/v) sodium pyrophosphate, 5 x Denhardt's solution (Denhardt, 1966), sonicated salmon sperm DNA (50 5g/ml) and 10% dextran sulphate (Wahl, 1979) at 42°C. See generally references Meinke, 1984; Reed, 1991; Dyson, 1991.

In a preferred embodiment, the polynucleotide sequences of the present invention share at least 60% identity, more preferably at least 80% identity, more preferably at least 90% identity and more preferably at least 95% identity with a sequence set out in Figure 1 or Figure 13, wherein the identity is calculated by the BLAST program blastn as described in Altschul et al (1997).